## CLAIMS:

5

15

20

- 1. An integrator circuit comprising:
- an operational amplifier having:
- a transistor stage having an input terminal and an output terminal;
- a feedback capacitor connected between the input terminal and the output terminal of the transistor stage;
- a resistor connected to the input terminal of the transistor stage;
- characterised by
- an additional circuit branch comprising:
- a second capacitor and a second resistor connected in series one with the other and connected between the output terminal of the transistor stage and voltage comprising the inverted input voltage to the integrator circuit.
  - 2. An integrator circuit according to claim 1 wherein a second additional circuit branch is provided.
  - 3. An integrator circuit according to claim 2 wherein the first additional circuit branch is connected between the non-inverted output of the transistor stage and the inverted input of the integrator and the second additional circuit branch is connected between the inverted output terminal of the transistor stage and the non-inverted input of the integrator.
  - 4. An integrator circuit according to any one of the preceding claims when comprising the first filter stage in a sigma delta analog to digital conversion circuit.
- 5. A sigma delta analog to digital conversion circuit comprising an integrator circuit according to any one of the preceding claims.
  - 6. A balanced amplifier comprising an integrator circuit according to any one of the preceding claims.